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Reply To Examiner's Remarks

Claims 1-20 and 43-48, as amended, are presented for consideration.

The Examiner rejects claims 1-20 and 43-48 under 35 U.S.C. 112, first paragraph, as reciting subject matter (vascular density) that was not clearly disclosed in the specification. Measurement of vascular density is discussed and disclosed at page 7, line 10, through page 8, line 4. This includes a discussion of the Vaupel et al technical article on measurement of vascular density. Page 7, lines 10-13 includes the sentence

"Where measured vascular density ^{not vascular size} for a target site is higher, by a multiplicative factor of 2-10 or higher, than a normal range of vascular density (e.g., 2-3 mm²) for that site, this condition often indicates the presence of a malignant tumor."

This material discloses that measurement of vascular density is included among the different measurements that can be made to distinguish between normal, benign and malignant medical conditions. The Applicant believes this discussion in the specification adequately discloses measurement of vascular density, for purposes of recitation of this measurement in the claims.

The Examiner rejects claims 1-20, 43-49, 51-52 and 54 under 35 U.S.C. 102(e) as anticipated by the disclosures in U.S. Patent No. 6,135,965, issued to Tumer et al. Claims 49-54 are cancelled herein.

The Examiner rejects claims 50 and 53 under 35 U.S.C. 103(a) as obvious in view of the combined disclosures of the Tumer et al patent and U.S. Patent No. 5,993,378, issued to Lemelson. Claims 49-54 are cancelled herein.

The Tumer et al patent discloses method and apparatus for spectroscopic detection of cervical pre-cancer, using fluorescence spectroscopy measurements that are classified using a trained radial basis neural network. This process distinguishes pre-cancerous tissue from normal tissue, using an optical system with a sequence of selected wavelengths of radiation. The Tumer et al patent does not disclose or suggest measurement of vascular density or measurement of a selected characteristic of a margin of a selected site in the body, as recited in independent

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claims 1 and 9. Because of these differences, the Applicant believes that claims 1 and 9, as amended, are allowable over the disclosures in the Tumer et al patent.

The Lemelson patent discloses an electro-optical instrument that uses fluorescent radiation or reflected light to detect presence of a selected disease. . The combined disclosures of the Tumer et al and Lemelson patents do not disclose or suggest measurement of vascular density or measurement of a selected characteristic of a margin of a selected site in the body, as recited in independent claims 1 and 9. Because of these differences, the Applicant believes that claims 1 and 9, as amended, are allowable over the combined disclosures in the Tumer et al patent and the Lemelson patent.

Claims 2-8, 19, 43 and 45-46 depend upon claim 1 and are believed to be allowable if claim 1 is allowable. Claims 10-18, 20, 44 and 47-48 depend upon claim 9 and are believed to be allowable if claim 9 is allowable.

The Examiner requires filing of an executed Terminal Disclaimer referencing U.S. Patent No. 6,109,270, issued to Robert Mah et al. The Applicant herewith submits the executed Terminal Disclaimer and apologises for not submitting this Terminal Disclaimer earlier.

The applicant requests that the Examiner pass the application, including claims 1-20 and 43-48, as amended, to issue as a U.S. patent.

Respectfully Submitted,

John Schipper

John Schipper

Patent representative for Applicant

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